OIPE IAP88
MAR 29 2006
PATENT & TRADEMARK OFFICE

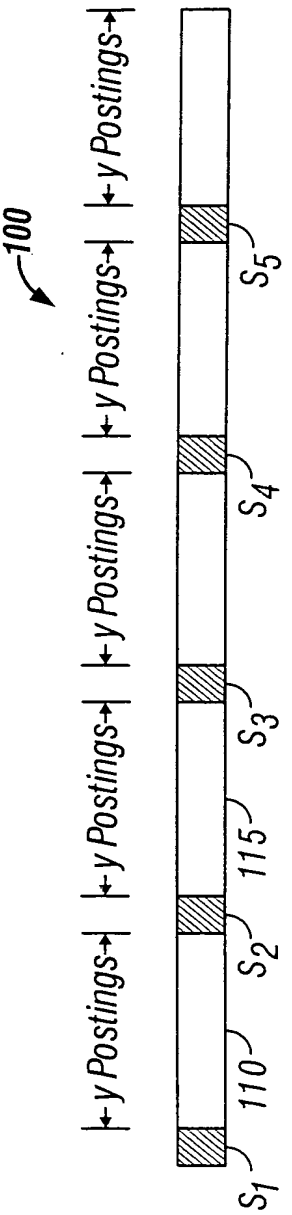

FIG.1

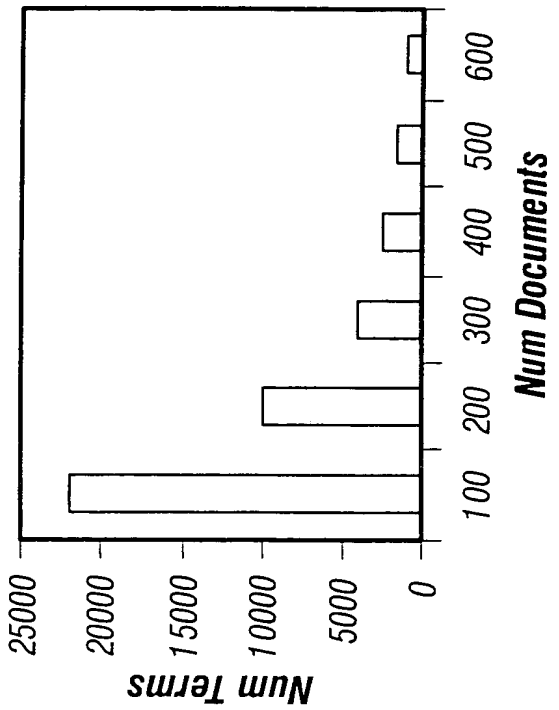

FIG. 2

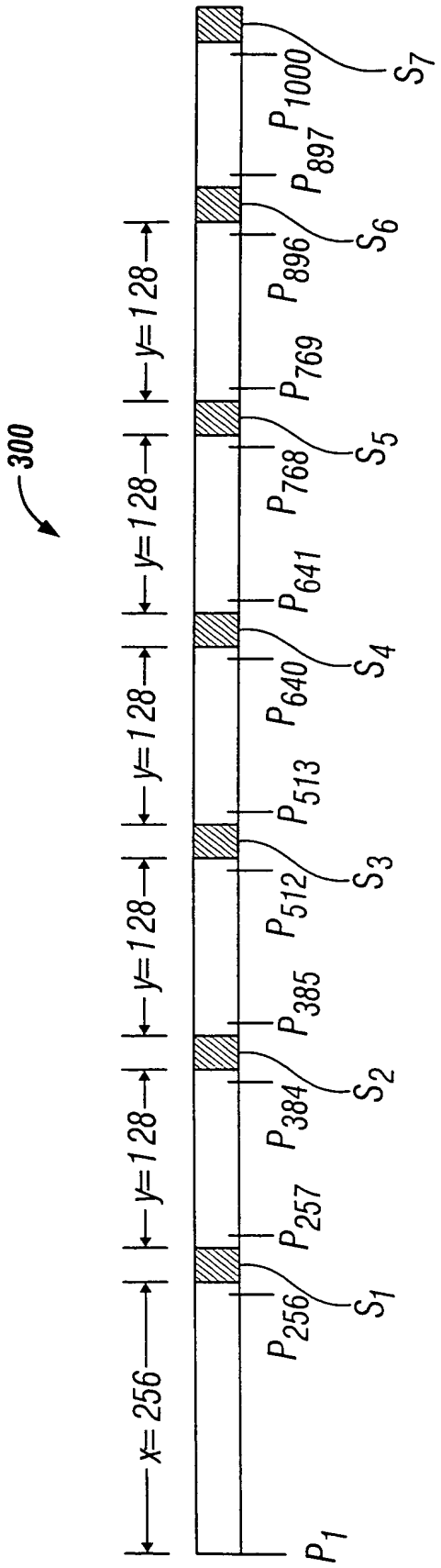
300
x= 256
y=128
y=128
y=128
y=128
y=128
P1
P256
P257
P384
P385
P512
P513
P640
P641
P768
P769
P896
P897
P1000
S1
S2
S3
S4
S5
S6
S7

FIG. 3

3/7

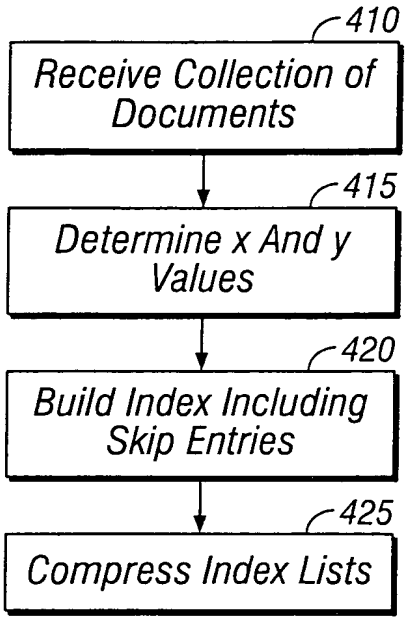

FIG. 4

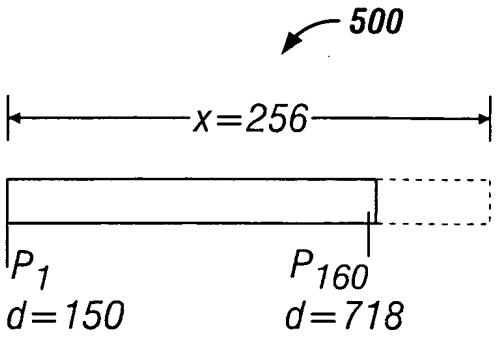

FIG. 5A

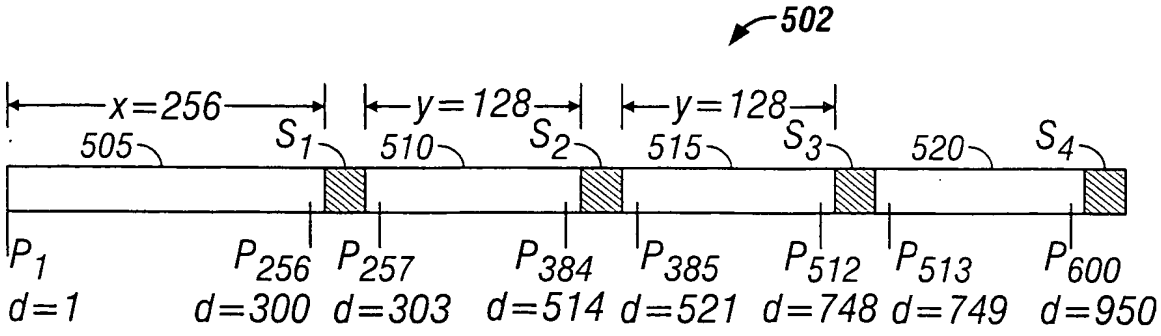

FIG. 5B

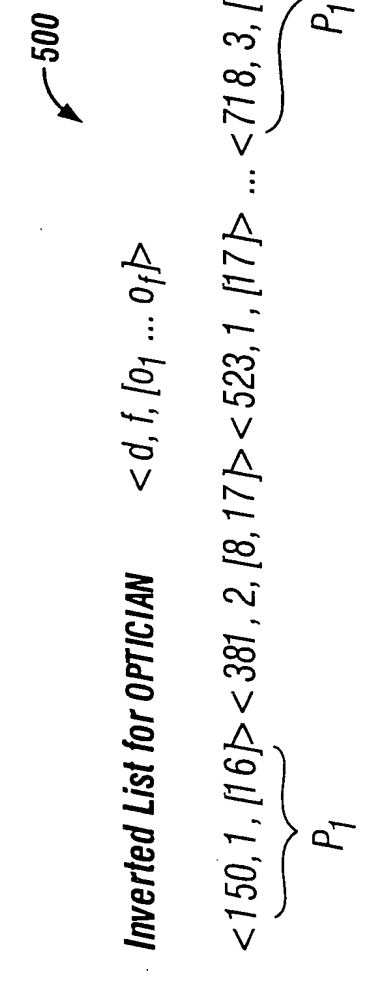
500
Inverted List for OPTICIAN
< d, f, [o1 ... of] >
< 150, 1, [16] > < 381, 2, [8, 17] > < 523, 1, [17] > ... < 718, 3, [4, 9, 15] >
P1
P160

FIG. 6A

Preliminary Results
(dpr1, ... dpr160)
(150, 381, 523, ... 723)
dpr1
dpr2
dpr3
dpr160

FIG. 6B

5/7

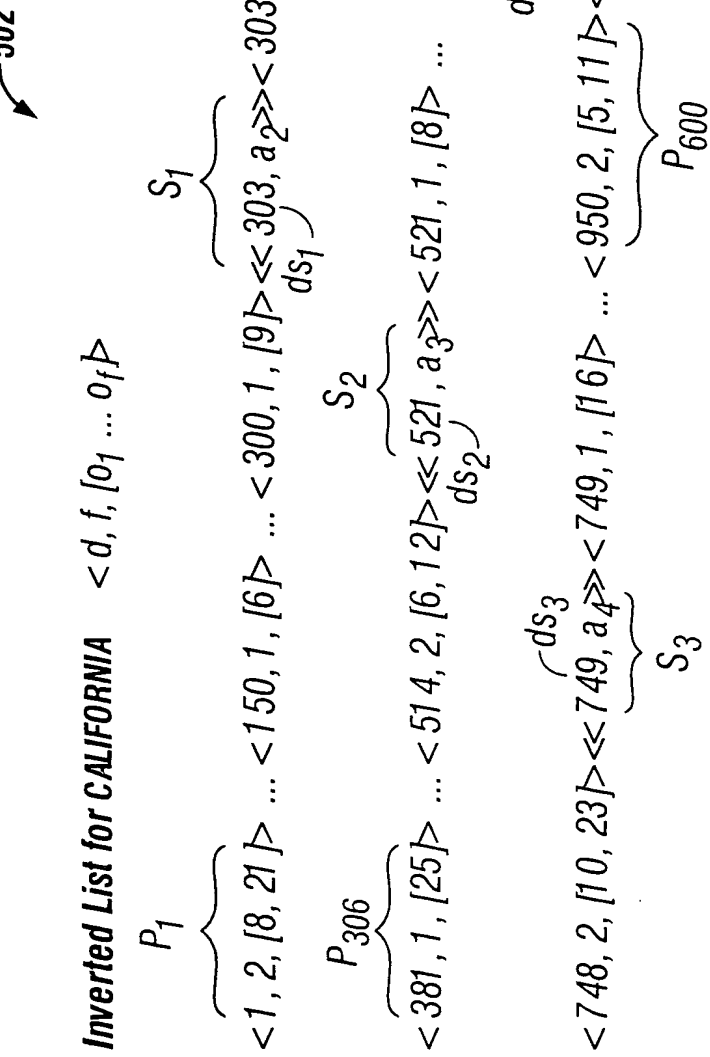
502
Inverted List for CALIFORNIA
< d, f, [o1 ... of] >
P1
S1
< 1, 2, [8, 21] > ... < 150, 1, [6] > ... < 300, 1, [9] > << 303, a2 >> < 303, 2, [14, 22] > ...
ds1
P306
S2
< 381, 1, [25] > ... < 514, 2, [6, 12] > << 521, a3 >> < 521, 1, [8] > ...
ds2
ds3
ds4
< 748, 2, [10, 23] > << 749, a4 >> < 749, 1, [16] > ... < 950, 2, [5, 11] > << 950 >>
S3
P600
S4

FIG. 7

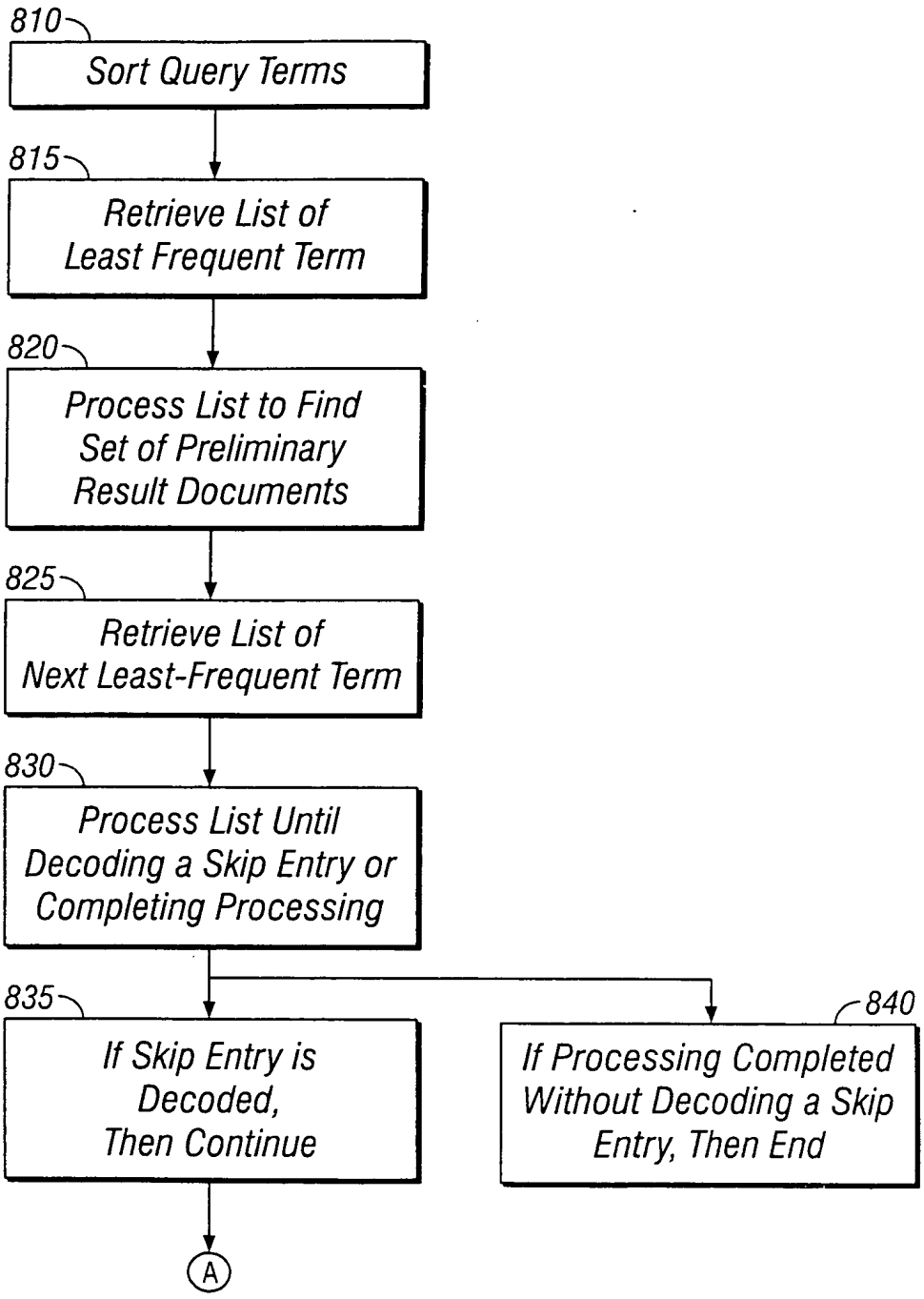
810
Sort Query Terms
815
Retrieve List of Least Frequent Term
820
Process List to Find Set of Preliminary Result Documents
825
Retrieve List of Next Least-Frequent Term
830
Process List Until Decoding a Skip Entry or Completing Processing
835
If Skip Entry is Decoded, Then Continue
840
If Processing Completed Without Decoding a Skip Entry, Then End
A

FIG. 8A

7/7

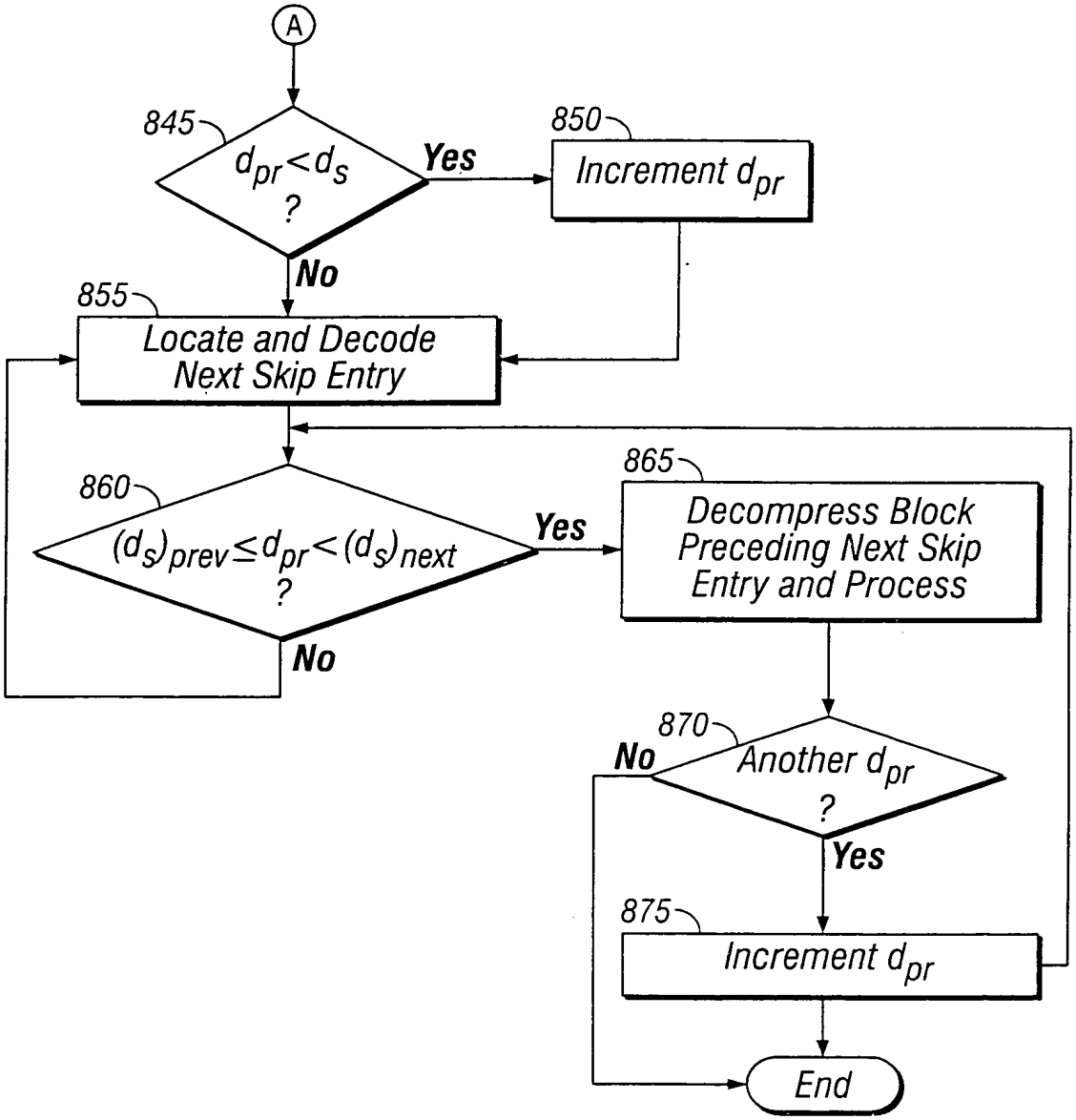
A
845
$d_{pr} < d_s$?
Yes
No
850
Increment d_{pr}
855
Locate and Decode Next Skip Entry
860
$(d_s)_{prev} \leq d_{pr} < (d_s)_{next}$?
Yes
No
865
Decompress Block Preceding Next Skip Entry and Process
870
Another d_{pr} ?
No
Yes
875
Increment d_{pr}
End

FIG. 8B